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EXAMINER	
LABAZE, EDWYN	
ART UNIT	**PAPER NUMBER**
2876	

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,048	CRISAN, ADRIAN	
	Examin r	Art Unit	
	EDWYN LABAZE	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 21-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 21-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Receipt is acknowledged of amendments filed on 10/21/2003.

2. Claims 1-15 and 21-24 are presented for examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 12-13, and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Danielson et al. (U.S. 5,850,358).

Re claims 1, 12: Danielson et al. discloses portable work station and data collection terminal including switchable multi-purpose touch screen display, which includes a [cursor] key 28 having a first data entry value associated with depressing the key 28 (as shown in fig. # 1 of Danielson et al.); the key 28 having one or more additional discrete data entry values [which could be where the data entry values are engraved on the cursor key such as in the telephone touch-pad where each key has more than one data entry values associated therewith, or as taught by Danielson et al. where each direction of the cluster cursor has a certain group(s) of alpha-numeric value associated with a prompted display from the data entry device], each of the one or more additional discrete data entry values being associated with deflecting [moving the cursor from one position to another one i.e. from the rest-position to either the left, right, up or down] the key in a predetermined direction (col.6, lines 55+; col.7, lines 4+); the key having a user

readable indication [such as alphanumeric value/data associated with each section of the key] of the first data entry value and each of the one or more additional discrete data entry values (col.7, lines 4+); and where the key is adapted for being depressed or deflected by a human fingertip [as described by Danielson et al. being a touch-activated system by alternately moving the cursor up or down, left or right which would require the need for a pointing object or human fingertip] (col.7, lines 31+).

Re claim 2: Danielson et al. teaches an apparatus and method, wherein the key first data entry value is a numeric data value and the one or more additional discrete data entry values are alphabetic data values (col.6, lines 55+; col.7, lines 4+).

Re claim 3: Danielson et al. discloses an apparatus and method, wherein the one or more additional discrete data values are associated with a predetermined zone/direction around a periphery of the key (col.7, lines 3+).

Re claim 4: Danielson et al. teaches an apparatus and method, wherein the one or more additional discrete data values are associated with an adjustable zone/direction [such as up, down, left or right] around a periphery of the key (col.7, lines 3+).

Re claim 5: Danielson et al. discloses an apparatus and method, further comprising of a controllable display 15 around the periphery of the key (col.4, lines 6, lines 32+).

Re claim 6: Danielson et al. teaches an apparatus and method, wherein the controllable display 15 is an LCD (col.6, lines 35+).

Re claim 7: Danielson et al. discloses an apparatus and method, wherein the number of predetermined zones/directions is user [so as to manipulate the retrieved data form the LCD 15] selectable (col.7, lines 4+).

Re claim 8: Danielson et al. teaches an apparatus and method, wherein the key 28 is square in shape and the number of predetermined directions is four (See Fig. # 1 of Danielson et al.; col.7, lines 2-4).

Re claim 13: Danielson et al discloses an apparatus and method, wherein the plurality of keys 27 is a 12-key telephone numeric keypad, and the additional discrete data entry values are alphabetic data values (col.7, lines 38+).

Re claim 21: Danielson et al. teaches an apparatus and method, which includes means of programming (col.7, lines 28+) a programmable data entry device 10 (See Fig. # 1 of Danielson et al.), the data entry device 10 having at least one hardware key 28 capable of being depressed and actuated in at least one additional predetermined direction wherein a first discrete data entry value corresponds with depressing the hardware key, the hardware key having a user readable indication of the first data entry value (See Fig. # 1 of Danielson et al.; col.6, lines 55+; col.7, lines 4+); defining a first data zone that is actuated when the hardware key is depressed and at least one additional data zone corresponding to the at least one additional predetermined direction, the at least one additional data zone corresponding to an additional discrete data entry value (col.7, lines 3+); generating a display [through the LCD 15] that includes a user readable indication corresponding to the additional discrete data entry value, the user readable indication being indicative of the at least one additional predetermined direction (col.6, lines 31+): wherein data corresponding to the additional discrete data entry value is generated when a user moves the hardware key in the predetermined direction (col.7, lines 3+).

Re claim 22: Danielson et al. discloses an apparatus and method, comprising of means of performing a test [which could be broadly interpreted as manipulating the cursor key in all four

directions or use the prompted display data entry value generated by the program/operating software so as to serve more than one function selected by the user] to determine if the at least one additional data zone is capable of being effectively actuated (col.15, lines 33-50); and wherein an acceptable result produced by the test [such as if the operator/user were supposed to actuate the left portion of the cursor key, but advertently reaches the "up" or any other section of the cursor key] indicates that the at least one additional data zone is capable of being effectively actuated and an unacceptable result [which is controlled the programming software in association with the main circuit board 219 as to accept the correct entry value/layout and proceed further operation] produced by the test indicates that the at least one additional data zone is not capable of being effectively actuated (col.18, lines 25+).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al. (U.S. 5,850,358).

The teachings of Danielson et al. have been discussed above.

Danielson et al. fails to teach a design with specific key shapes (i.e. square, circular, hexagonal, and octagonal).

However, since the apparatus is required to use a four-cursor key, the specific structure with different shapes (i.e. circular, hexagonal, octagonal) is obtained and falls within an engineering design choice.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ different shapes of the key in the system of Danielson et al. in order to provide to attract consumer's attention. Furthermore, the cursor key with different shapes (i.e. square, circular, hexagonal, octagonal by reprogramming the operating software of the device so as to allocate/group different data entry alphanumerical values to each section of the cursor key as it has been known/done in the art for cellular phone cursors [see disclosed JP 10200605 by Norio et al.]) and sizes of the key do not carry any unexpected result and novelty; only offer a different look, less entry buttons/keys on the device (although a bit more complicated device to operate) and size of the device. Moreover, such modification would have been an obvious extension as taught by Danielson et al., therefore an obvious expedient.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al. (U.S. 5,850,358).

The teachings of Danielson et al. have been discussed above.

Danielson et al. fails to teach a design with a three-key watch keypad.

However, since the apparatus is required to use alphanumerical value for each key, the specific structure with a three-key pad is obtained and falls within an engineering design choice.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to utilize a contracted three-key keypad version in the system of Danielson et al. wherein each key carry four states (i.e. the first key has functions "1, 2, 3, and 4").

Furthermore, the above system can be compared and substituted with different design either of "a three-key" or "a four-key" keypad wherein each key can be programmed to display or depress one or more numeric data values. Moreover, such modification would have been an obvious extension of the teaching of Danielson et al., therefore an expedient.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al. (U.S. 5,850,358) in view of Dodd (U.S. 6,127,949).

The teachings of Danielson et al. have been discussed above.

Danielson et al. fails to teach a Qwerty keyboard.

Dodd teaches an ergonomic computer keyboard, which includes a Qwerty keyboard (col.10, lines 37-55).

In view of the teaching Dodd, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ into the teachings of Danielson et al. a Qwerty keypad as modified as claim 14 above so as to maintain the conventional layout by separating the alphabetic data entry values to one side and the numeric data entry values on the other side of the keyboard. Furthermore, such modification would be beneficial to the user in helping reducing stress of the fingers and wherein multiple data entry values (i.e. alphabetic or numeric) could be programmed one key on the keypad, and user selectable without typing expertise. Moreover, such modification would have been an obvious extension of the teaching of Danielson et al.

9. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al. (U.S. 5,850,358).

The teachings of Danielson et al. have been discussed above.

Danielson et al. fails to teach means of selecting a different number of zones if the user test produces an acceptable result and repeating performing the test; and selecting a different number of data zones if the test produces acceptable results and repeating performing the test.

However, since the apparatus is required to have a program/operating software to control the data entry values and performing selected operations, the specific structure with different subroutines of the program is obtained and falls within an engineering design choice.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the software/programming of Danielson et al. so as to incorporate a verification subroutine or means of selecting a different number of zones if the user test produces an acceptable result and repeating performing the test; and selecting a different number of data zones if the test produces acceptable results and repeating performing the test. Furthermore, such modification would prevent unwilling error and produce adequate test results. Moreover, such modification would have been an obvious extension of the teachings of Danielson et al.

Response to Arguments

10. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gibbs et al. (U.S. 5,539,193) discloses modular hand-held data entry system.

Hasebe (U.S. 5,987,609) teaches system for remotely securing/locking a stolen wireless device via an email message.

McDonald et al. (U.S. 6,069,848) discloses life time clock.

Oikawa et al. (U.S. 6,062,749) teaches dial input device.

Fujita et al. (US 2002/0039485) discloses multi controller.

Tsutsui (US 2002/0119820) teaches input key for game controller.

Kalis et al. (US 2002/0130017) discloses combination cursor key and enter key for hand held electronic devices.

Norio et al. (JP 10200605) teaches communication terminal equipment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (703) 305-5437. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

el
Edwyn Labaze
Patent Examiner
Art Unit 2876
November 15, 2003

THIEN M. LE
PRIMARY EXAMINER